## **AMENDMENTS TO THE CLAIMS**

This listing of the claims will replace all prior versions and listings of claims in the application:

## Listing of Claims:

- 1. (Previously Amended) A polymerization process comprising contacting:
  - (a) a catalyst system;
  - (b) monomers comprising at least 85 wt% propylene monomers by total weight of the monomers; and
  - (c) an antistatic agent that has been pre-contacted with a scavenger; in a reactor under polymerization conditions; wherein the antistatic agent is present from 0.3 to 1.5 ppm based on the weight of the monomers introduced into the reactor.
- 2. (Cancelled)
- 3. (Currently Amended) The polymerization process of claim 2 1, wherein the scavenger comprises an aluminum alkyl compound.
- 4. (Original) The polymerization process of claim 3, wherein the aluminum alkyl compound is selected from the group consisting of triethylaluminum, trimethylaluminum, triisobutylaluminum, tri-n-hexylaluminum, diethyl aluminum chloride, and mixtures thereof.
- 5. (Original) The polymerization process of claim 4, wherein the aluminum alkyl compound is triethylaluminum.
- 6. (Original) The polymerization process of claim 1, wherein the antistatic agent comprises a polysulfone copolymer, a polymeric polyamine, an oil-soluble sulfonic acid, or mixtures thereof, with or without a solvent.
- 7. (Cancelled)
- 8. (Cancelled)
- 9. (Original) The polymerization process of claim 1, wherein the antistatic agent is present from about 0.3 to about 0.8 ppm based on the weight of the monomers introduced into the reactor.

- 10. (Original) The polymerization process of claim 1, wherein the catalyst system comprises a supported metallocene catalyst system.
- 11. (Original) The polymerization process of claim 1, wherein the catalyst system comprises a supported metallocene catalyst system comprising a support and a metallocene, the metallocene represented by the following:

wherein M is a metal of Group 4, 5, or 6 of the Periodic Table;

 $R^1$  and  $R^2$  are identical or different, and are one of a hydrogen atom, a  $C_1$ - $C_{10}$  alkyl group, a  $C_1$ - $C_{10}$  alkoxy group, a  $C_6$ - $C_{10}$  aryl group, a  $C_6$ - $C_{10}$  aryloxy group, a  $C_2$ - $C_{10}$  alkenyl group, a  $C_7$ - $C_{40}$  arylalkyl group, a  $C_7$ - $C_{40}$  alkylaryl group, a  $C_8$ - $C_{40}$  arylalkenyl group, or a halogen atom;

 $R^5$  and  $R^6$  are identical or different, and are one of a halogen atom, a  $C_1$ - $C_{10}$  alkyl group, which may be halogenated, a  $C_6$ - $C_{10}$  aryl group, which may be halogenated, a  $C_2$ - $C_{10}$  alkenyl group, a  $C_7$ - $C_{40}$ -arylalkyl group, a  $C_7$ - $C_{40}$  alkylaryl group, a  $C_8$ - $C_{40}$  arylalkenyl group, a -NR2 $^{15}$ , -SR $^{15}$ , -OSiR3 $^{15}$  or -PR2 $^{15}$  radical, wherein R $^{15}$  is one of a halogen atom, a  $C_1$ - $C_{10}$  alkyl group, or a  $C_6$ - $C_{10}$  aryl group;

 $R^7$  is

-B(R<sup>11</sup>)-, -Al(R<sup>11</sup>)-, -Ge-, -Sn-, -O-, -S-, -SO-, -SO<sub>2</sub>-, -N(R<sup>11</sup>)-, -CO-, -P(R<sup>11</sup>)-, or -P(O)(R<sup>11</sup>)-;

wherein  $R^{11}$ ,  $R^{12}$  and  $R^{13}$  are identical or different and are a hydrogen atom, a halogen atom, a  $C_1$ - $C_{20}$  alkyl group, a  $C_1$ - $C_{20}$  fluoroalkyl group, a  $C_6$ - $C_{30}$  aryl group, a  $C_6$ - $C_{30}$  fluoroaryl group, a  $C_1$ - $C_{20}$  alkoxy group, a  $C_2$ - $C_{20}$  alkenyl group, a  $C_7$ - $C_{40}$  arylalkyl group, a  $C_8$ - $C_{40}$  arylalkenyl group, a  $C_7$ - $C_{40}$  alkylaryl group, or  $R^{11}$  and  $R^{12}$ , or  $R^{11}$  and  $R^{13}$ , together with the atoms binding them, can form ring systems;

M<sup>2</sup> is silicon, germanium or tin;

R<sup>8</sup> and R<sup>9</sup> are identical or different and have the meanings stated for R<sup>11</sup>; m and n are identical or different and are zero, 1 or 2, m plus n being zero, 1 or 2; and the radicals R<sup>3</sup>, R<sup>4</sup>, and R<sup>10</sup> are identical or different and have the meanings stated for R<sup>11</sup>, R<sup>12</sup> and R<sup>13</sup>.

- 12. (Original) The polymerization process of claim 11, wherein the support is a fluorided support.
- 13. (Original) The polymerization process of claim 1, wherein the catalyst system comprises a metallocene catalyst system comprising a metallocene selected from the group consisting of Dimethylsilandiylbis (2-methyl-4-phenyl-1-indenyl) zirconium dimethyl; Dimethylsilandiylbis(2-methyl-4,5-benzoindenyl) zirconium dimethyl; Dimethylsilandiylbis(2-methyl-4,6-diisopropylindenyl) zirconium dimethyl; Dimethylsilandiylbis(2-ethyl-4-phenyl-1-indenyl) zirconium dimethyl; Dimethylsilandiylbis (2-ethyl-4-naphthyl-1-indenyl) zirconium dimethyl;

Dimethylsilandiylbis(2-methyl-4-(1-naphthyl)-1-indenyl) zirconium dimethyl; Dimethylsilandiylbis(2-methyl-4-(2-naphthyl)-1-indenyl) zirconium dimethyl; Dimethylsilandiylbis(2-methyl-indenyl) zirconium dimethyl; Dimethylsilandiylbis(2-methyl-4,5diisopropyl-1-indenyl) zirconium dimethyl; Dimethylsilandiylbis(2,4,6-trimethyl-1-indenyl) zirconium dimethyl; Dimethylsilandiylbis(2-methyl-1-indenyl) zirconium dimethyl; Dimethylsilandiylbis(2-ethyl-1-indenyl) zirconium dimethyl; Dimethylsilandiylbis(2,5,6trimethyl-1-indenyl) zirconium dimethyl; Dimethylsilandiylbis (2-methyl-4-phenyl-1-indenyl) zirconium dichloride; Dimethylsilandiylbis(2-methyl-4,5-benzoindenyl) zirconium dichloride; Dimethylsilandiylbis(2-methyl-4,6-diisopropylindenyl) zirconium dichloride; Dimethylsilandiylbis(2-ethyl-4-phenyl-1-indenyl) zirconium dichloride; Dimethylsilandiylbis (2ethyl-4-naphthyl-1-indenyl) zirconium dichloride; Dimethylsilandiylbis(2-methyl-4-(1-naphthyl)-1-indenyl) zirconium dichloride; Dimethylsilandiylbis(2-methyl-4-(2-naphthyl)-1-indenyl) zirconium dichloride; Dimethylsilandiylbis(2-methyl-indenyl) zirconium dichloride; Dimethylsilandiylbis(2-methyl-4,5-diisopropyl-1-indenyl) zirconium dichloride; Dimethylsilandiylbis(2,4,6-trimethyl-1-indenyl) zirconium dichloride; Dimethylsilandiylbis(2methyl-1-indenyl) zirconium dichloride; Dimethylsilandiylbis(2-ethyl-1-indenyl) zirconium dichloride; Dimethylsilandiylbis(2,5,6-trimethyl-1-indenyl) zirconium dichloride; and mixtures thereof.

- 14. (Original) The polymerization process of claim 13, wherein the catalyst system further comprises a support.
- 15. (Original) The polymerization process of claim 14, wherein the support is a fluorided support.

16.-61. (Cancelled)

- 62. (Currently amended) A method to reduce fouling in a reactor comprising the step of:
  - (a) adding propylene monomers into the reactor;
  - (b) adding a catalyst system comprising a metallocene catalyst system;
  - (c) adding an antistatic agent that has been pre-contacted with a scavenger; and
  - (d) forming a polymer in the reactor;

wherein the antistatic agent is present from about .05 0.3 to about 200 1.5 ppm based on the weight of the propylene monomers introduced into the reactor.

- 63. (Cancelled)
- 64. (Original) The method of claim 63, wherein the scavenger comprises an aluminum alkyl compound.
- 65. (Original) The method of claim 64, wherein the aluminum alkyl compound is selected from the group consisting of triethylaluminum, trimethylaluminum, tri-isobutylaluminum, tri-n-hexylaluminum, diethyl aluminum chloride, and mixtures thereof.
- 66. (Original) The method of claim 65, wherein the aluminum alkyl compound is triethylaluminum.
- 67. (Original) The method of claim 62, wherein the antistatic agent comprises a polysulfone copolymer, a polymeric polyamine, an oil-soluble sulfonic acid, or mixtures thereof, with or without a solvent.
- 68. (Cancelled)
- 69. (Cancelled)
- 70. (Original) The method of claim 62, wherein the antistatic agent is present from about 0.3 to about 0.8 ppm based on the weight of the propylene monomers introduced into the reactor.
- 71. (Original) The method of claim 62, wherein the metallocene catalyst system comprises a supported metallocene catalyst system.
- 72. (Original) The method of claim 62, wherein the metallocene catalyst system comprises a support and a metallocene, the metallocene represented by the following:

 $P(O)(R^{11})$ -;

wherein M is a metal of Group 4, 5, or 6 of the Periodic Table;

 $R^1$  and  $R^2$  are identical or different, and are one of a hydrogen atom, a  $C_1$ - $C_{10}$  alkyl group, a  $C_1$ - $C_{10}$  alkoxy group, a  $C_6$ - $C_{10}$  aryl group, a  $C_6$ - $C_{10}$  aryloxy group, a  $C_2$ - $C_{10}$  alkenyl group, a  $C_7$ - $C_{40}$  arylalkyl group, a  $C_7$ - $C_{40}$  alkylaryl group, a  $C_8$ - $C_{40}$  arylalkenyl group, or a halogen atom;

 $R^5$  and  $R^6$  are identical or different, and are one of a halogen atom, a  $C_1$ - $C_{10}$  alkyl group, which may be halogenated, a  $C_6$ - $C_{10}$  aryl group, which may be halogenated, a  $C_2$ - $C_{10}$  alkenyl group, a  $C_7$ - $C_{40}$  -arylalkyl group, a  $C_7$ - $C_{40}$  alkylaryl group, a  $C_8$ - $C_{40}$  arylalkenyl group, a -NR<sub>2</sub><sup>15</sup>, -SR<sup>15</sup>, -OR<sup>15</sup>, -OSiR<sub>3</sub><sup>15</sup> or -PR<sub>2</sub><sup>15</sup> radical, wherein R<sup>15</sup> is one of a halogen atom, a  $C_1$ - $C_{10}$  alkyl group, or a  $C_6$ - $C_{10}$  aryl group;

wherein  $R^{11}$ ,  $R^{12}$  and  $R^{13}$  are identical or different and are a hydrogen atom, a halogen atom, a  $C_1$ - $C_{20}$  alkyl group, a  $C_1$ - $C_{20}$  fluoroalkyl group, a  $C_6$ - $C_{30}$  aryl group, a  $C_6$ - $C_{30}$  fluoroaryl group, a  $C_1$ - $C_{20}$  alkoxy group, a  $C_2$ - $C_{20}$  alkenyl group, a  $C_7$ - $C_{40}$  arylalkyl group, a  $C_8$ - $C_{40}$  arylalkenyl group, a  $C_7$ - $C_{40}$  alkylaryl group, or  $R^{11}$  and  $R^{12}$ , or  $R^{11}$  and  $R^{13}$ , together with the atoms binding them, can form ring systems;

M<sup>2</sup> is silicon, germanium or tin;

R<sup>8</sup> and R<sup>9</sup> are identical or different and have the meanings stated for R<sup>11</sup>;

m and n are identical or different and are zero, 1 or 2, m plus n being zero, 1 or 2; and the radicals R<sup>3</sup>, R<sup>4</sup>, and R<sup>10</sup> are identical or different and have the meanings stated for R<sup>11</sup>, R<sup>12</sup> and R<sup>13</sup>.

- 73. (Original) The method of claim 72, wherein the support is a fluorided support.
- 74. The method of claim 62, wherein the metallocene catalyst system comprises a (Original) metallocene selected from the group consisting of Dimethylsilandiylbis (2-methyl-4-phenyl-1indenyl) zirconium dimethyl; Dimethylsilandiylbis(2-methyl-4,5-benzoindenyl) zirconium dimethyl; Dimethylsilandiylbis(2-methyl-4,6-diisopropylindenyl) zirconium dimethyl; Dimethylsilandiylbis(2-ethyl-4-phenyl-1-indenyl) zirconium dimethyl; Dimethylsilandiylbis (2ethyl-4-naphthyl-1-indenyl) zirconium dimethyl; Dimethylsilandiylbis(2-methyl-4-(1-naphthyl)-1-indenyl) zirconium dimethyl; Dimethylsilandiylbis(2-methyl-4-(2-naphthyl)-1-indenyl) zirconium dimethyl; Dimethylsilandiylbis(2-methyl-indenyl) zirconium dimethyl; Dimethylsilandiylbis(2-methyl-4,5-diisopropyl-1-indenyl) zirconium dimethyl; Dimethylsilandiylbis(2,4,6-trimethyl-1-indenyl) zirconium dimethyl; Dimethylsilandiylbis(2methyl-1-indenyl) zirconium dimethyl; Dimethylsilandiylbis(2-ethyl-1-indenyl) zirconium dimethyl; Dimethylsilandiylbis(2,5,6-trimethyl-1-indenyl) zirconium dimethyl; Dimethylsilandiylbis (2-methyl-4-phenyl-1-indenyl) zirconium dichloride; Dimethylsilandiylbis(2-methyl-4,5-benzoindenyl) zirconium dichloride; Dimethylsilandiylbis(2methyl-4,6-diisopropylindenyl) zirconium dichloride; Dimethylsilandiylbis(2-ethyl-4-phenyl-1indenyl) zirconium dichloride; Dimethylsilandiylbis (2-ethyl-4-naphthyl-1-indenyl) zirconium dichloride; Dimethylsilandiylbis(2-methyl-4-(1-naphthyl)-1-indenyl) zirconium dichloride; Dimethylsilandiylbis(2-methyl-4-(2-naphthyl)-1-indenyl) zirconium dichloride; Dimethylsilandiylbis(2-methyl-indenyl) zirconium dichloride; Dimethylsilandiylbis(2-methyl-4,5-diisopropyl-1-indenyl) zirconium dichloride; Dimethylsilandiylbis(2,4,6-trimethyl-1-indenyl) zirconium dichloride; Dimethylsilandiylbis(2-methyl-1-indenyl) zirconium dichloride;

Dimethylsilandiylbis(2-ethyl-1-indenyl) zirconium dichloride; Dimethylsilandiylbis(2,5,6-trimethyl-1-indenyl) zirconium dichloride; and mixtures thereof.

- 75. (Original) The method of claim 74, wherein the metallocene catalyst system further comprises a support.
- 76. (Original) The method of claim 75, wherein the support is a fluorided support.
- 77. (Original) The method of claim 62, wherein the polymer comprises a propylene homopolymer or copolymer.

## 78.-94. (Cancelled)

95. (New) The polymerization process of claim 1, wherein the polymerization process is selected from the group consisting of continuous gas phase polymerization processes, continuous slurry polymerization processes and continuous polymerization processes.